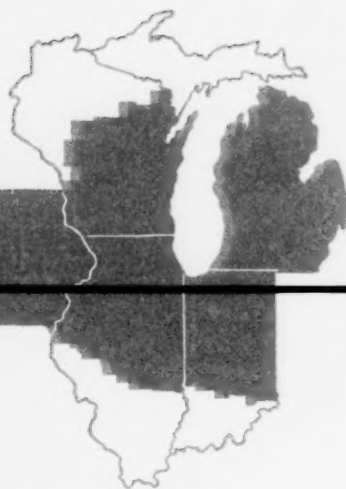


A review by the **Federal Reserve Bank of Chicago**

Business Conditions



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THE Trend OF BUSINESS

Four months ago we reported that "the most noteworthy economic development of recent months appears to be the evidence that consumer buying at retail stores has again turned upward." And that "any sustained upturn in consumer takings could create a more confident attitude on the part of businessmen toward pending decisions on inventory policy and capital outlays."

It is now apparent that the rise in consumer spending, which might have insulated the over-all economy from the effects of cutbacks in arms outlays and a slowdown in capital goods activity, was temporary and did not foreshadow the shape of over-all business trends for the remainder of the year.

Retail sales, seasonally adjusted, reached a peak of 17 billion dollars in July and August—4 per cent above the December-April plateau. September, October and November, however, showed successive declines. In November, seasonally adjusted department store sales were 6 per cent below the August rate nationally. From early reports of strong December sales at department stores, the November showing probably should be discounted. In the Seventh District, sales for the eight weeks prior to December 28 were only slightly off the 1956 pace.

Layoffs mount

The decline in personal income since August reflects a slide in employment which began at the same time. The number of manufacturing jobs had hit a high back in De-

cember of 1956, but strength in other lines had kept the seasonally adjusted total moving up for another eight months.

During the fall, nearly all major categories participated in the employment decline. As a result, total nonfarm employment slipped below the year-ago level in November for the first time in three years. Reports for the Midwest indicate a similar trend, but employment in most of these states was already below 1956 levels in October. Recent data on unemployment claims indicates that the drop-off in employment continued through December both here and in the nation.

Although the slide in employment is significant, it has not reached a large portion of the labor force. Successive monthly declines from August through November brought the total down only about 1 per cent. Even in manufacturing, mining and construction declines were limited to 2 or 3 per cent. In certain smaller groupings such as machinery, of course, the layoffs have been proportionately more numerous.

Unemployment, nationally, was estimated at 3.2 million in November—up 680,000 from October. In 1956, November showed a rise of 554,000 over the October number. Unemployment will probably rise further in January and February. If the usual seasonal pattern prevails, the total number of jobless is likely to top 4 million for the first time since early 1950. Unemployment would then approximate 6 per cent of the labor force.

In January and February of 1957 it averaged 4.9 and 4.7 per cent respectively.

The economic state of mind

Although employment and personal income have declined significantly since August, a portion of the cutback in consumer spending must be attributed to other causes. Some emphasis is placed upon the flu virus which invaded many homes during the fall. In some firms absenteeism was running double normal levels. But it would appear that another virus—diminishing confidence—has played a larger role in the slowing of business and consumer buying.

Personal income was only a fraction of 1 per cent lower in November than in August, but retail trade was down about 2.8

per cent. Similarly, new orders of manufacturing firms, lagging behind shipments since late 1956, dropped back even further relative to sales in October and November.

Another indication of business caution is provided by the recent National Industrial Conference Board survey of capital expenditure appropriations by the 1,000 largest manufacturing concerns. During the third quarter, new authorizations were off 31 per cent from the corresponding 1956 quarter. Other surveys have shown similar results.

When buyer psychology deteriorates faster than basic economic strength, there are two possible outcomes. Either the pessimism evaporates and the down movement corrects itself fairly soon, or the underlying props are weakened as continued adverse sentiment

“creates its own down-draft” and the adjustment period is extended. The probable duration of the current adjustment remains so far uncertain.

A number of recent forecasts of the rate of economic activity for 1958 indicate modest declines from the record levels of 1957. A few observers foresee a decline of 10 per cent in industrial production between the two years, but more analysts expect any drop to range between 2 and 5 per cent. Total spending, the gross national product, is expected to be off slightly, if at all.

Employment in production jobs declines more than in service lines

(nonfarm wage and salary employment, seasonally adjusted)

	Change from November 1956 to November 1957		Change from August 1957 to November 1957	
	Number	Per cent	Number	Per cent
Total	—252,000	—0.5	—655,000	—1.2
Manufacturing ...	—620,000	—3.6	—384,000	—2.2
Mining	— 3,000	—0.3	— 23,000	—2.6
Construction	—133,000	—4.3	— 98,000	—3.2
Services	+504,000	+1.6	—150,000	—0.5
Transportation ..	— 78,000	—2.8	— 69,000	—2.5
Public utilities ..	+ 11,000	+0.7	— 9,000	—0.6
Trade	+178,000	+1.5	—103,000	—0.8
Finance	+ 39,000	+1.6	+ 11,000	+0.4
Government ...	+158,000	+2.1	— 26,000	—0.3
Other services ..	+196,000	+3.0	+ 46,000	+0.7

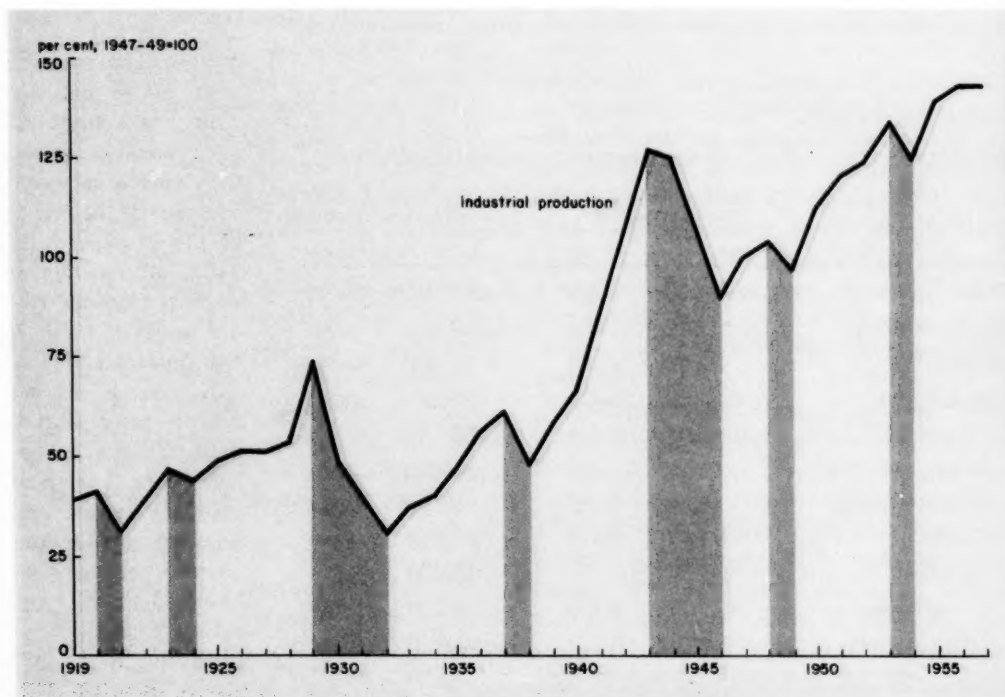
Polls of business executives concerning prospects for their own industries show relative firmness. A typical tabulation made by the NAM shows 81 per cent of the respondents expecting sales this year to be as good as 1957 or better, and 55 per cent expecting profits to hold at recent levels or expand. Announcements by firms in such diverse fields as electric power, tires, chemicals, petroleum, electronics, air conditioning, food processing and road-building equipment call for significant gains next year. For the most part these are industries riding a strong, long-term growth trend which provides insulation against any but a sizable general let-

down. The industries expected to be off the most are industrial machinery, steel and, perhaps, consumer durables. These are the easily postponable "metal items" in which Midwest producers figure prominently.

Strength and weaknesses

The reasoning of most professional forecasters, at present, runs about as follows: now that the downtrend in military outlays is in the process of being reversed, the major element of weakness relates to plant and equipment outlays of business firms. These outlays, which account for 8 or 9 per cent of total spending, historically constitute the

Most declines in industrial production have been short-lived



most volatile segment. A surge in plant and equipment was largely responsible for the 1955-56 rise in business, and a substantial slippage in this sector is now virtually certain during 1958. During the first quarter of the year current outlays are expected to be 5 per cent below the 1957 rate.

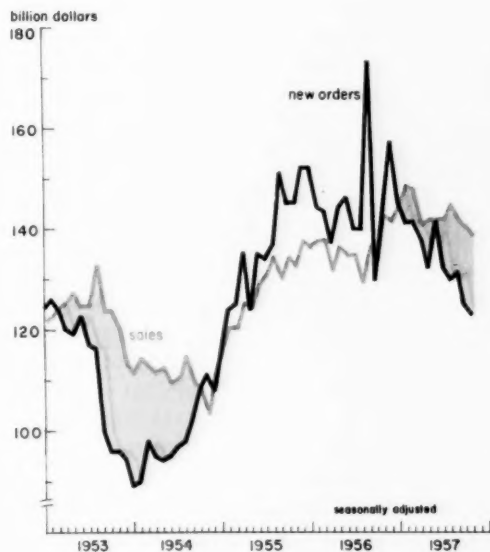
The other component of business investment, inventory buying, also is contributing to the downtrend. Inventories have not been "high" in most lines, but they are adequate and easily replenished. Any weakening in sales provides a further incentive for cutting stocks. Book values of total inventories began to decline in October 1957 and the movement has been a major factor in the drop-off in production and employment in succeeding months.

Another bearish factor is the current and prospective slide in exports resulting from a worldwide slowdown in activity, the expansion of capacity abroad and the tight financial position of some customer nations.

For the remainder of the economy, a much larger segment, the picture is quite different. Federal, state and local government expenditures, which provide about one-fifth of total purchases of goods and services, are counted upon for a rise of about 5 billion dollars.

It is possible that consumer retrenchment will provide further impetus to the current downswing. This is likely only if there is substantial weakening in the demand for durables, particularly autos. But consumer buying is closely tied to personal income, which is expected to hold close to the current level. Wage rates will rise somewhat and offset in part, at least, any shortening of average work week or decline in employment. Payments to the unemployed, retired persons and those receiving public assistance will also tend to offset any loss of income due to unemploy-

New orders for hard goods fell behind sales in the fall



ment. It would appear, therefore, that consumer spending, which accounts for almost two-thirds of total outlays, will likely hold firm or even increase somewhat for 1958 as a whole.

Nonindustrial construction prospects remain good with an increase in expenditures anticipated mainly as a result of an upswing in public and residential construction, aided by easier credit conditions. This sector accounts for about 10 per cent of total spending.

How long can a decline last?

One significant aspect of most forecasts for 1958 is that they call for a "bottoming out" sometime around midyear. In part, this expectation stems from the post-sputnik re-evaluation of the nation's defense status. Any easing of current restraint on defense spend-

ing is expected by some to result in a rise in outlays which would extend well beyond the missile field itself, where the dollar amounts are necessarily limited. Others, expecting no substantial increase in military spending, believe that Federal taxes may be reduced and provide a stimulus to personal and business spending.

But quite aside from Federal taxing-spending considerations, the knowledge that the American economy's basic bent is in an upward direction constitutes an antidote to pessimism. The memory of the mildness of the 1949 and 1954 declines is still fresh in mind. In both cases the drop from peak to trough in industrial production was limited to less than 10 per cent, aggregate employment to 3 or 4 per cent and total spending to 3 per cent. Perhaps more important is the fact that the duration of each of these slide-offs was only 6 to 15 months, depending upon the particular measure of activity. Moreover, each recession was followed by

substantial upswings in output and some advance in prices.

An examination of experience over a longer period provides further reason for confidence. Since 1919, the earliest year of the industrial production estimates, there have been eight periods of "sustained" decline. Only twice did the slide extend for more than five successive quarters. These were the "great depression," 1929-32, and the wartime cutback, 1943-46.

Three of the "recessions" took place during the Twenties: in 1920-21, 1923-24, 1927-28. This was before the era of "built-in-stabilizers," and conscious anti-recession policy on the part of the Government.

Ruling out the World War II period as inapplicable, we are left with only one period (1929-32) when a year of lower business activity was not followed by an upswing. By and large our experience since 1919 indicates that interruptions in growth are not likely to extend for long periods.

What's wrong with carloadings?

Since early fall, freight carloadings have been running substantially lower than in late 1956. From Labor Day through Thanksgiving, about 1.2 million fewer cars were loaded than in the same weeks a year earlier. This was a drop of almost 12 per cent. Reports for succeeding weeks, moreover, were indicative of still further weakening as the year drew to a close.

The first months of 1957 showed up relatively well, with weekly totals averaging only about 4 per cent below the corresponding

1956 figures. During July and August, the year-to-year comparison favored 1957, but only because traffic during the summer of 1956 had been sharply curtailed by the steel strike.

A useful business indicator?

While statistics on freight carloadings undoubtedly have an important place in the rail analyst's tool kit, it is not altogether clear just what value they have nowadays as a clue to the state of business in general. They have

one immense advantage over many other classes of business statistics—namely, quick availability. Last week's national totals, distributed by broad commodity classes, will appear in the financial pages on Thursday or Friday of this week.

There are few business barometers of comparable breadth available on so nearly current a basis as this. Because of the urgency of the need for up-to-the-minute readings in a time of rapid flux in economic conditions, the weekly carloadings reports have been followed during the past season with considerable interest. The inferences, of course, have been distinctly bearish—considerably more so, indeed, than the situation by and large has warranted.

Relation to freight movement

Intercity freight traffic volume presumably has meaning as a business barometer because of its obvious connection with the tempo of productive activity. But carloadings leave a good deal to be desired as a measure of freight volume.

For one thing, the tonnage of freight handled per car varies widely. A stock car loaded with live animals will carry only a minor fraction of the tonnage typically accounted for by a hopper or gondola carrying coal. In 1956, for example, the average load per car handling animals and animal products was 14.7 tons; for products of mines it was 59.3 tons, or four times as much.

If the composition or "mix" of the rails' freight business undergoes change, tonnage originated and the number of cars loaded may behave differently. Carloadings in 1956 were up 5½ per cent from the total for the year before. Tonnage originated, however, increased only 3⅔ per cent. Loadings in 1955 were 11 per cent higher than in 1954; tons originated, 14 per cent higher.

Tons loaded or tonnage originated would doubtless serve better than carloadings as a measure of freight traffic generated by the railroads. Unfortunately, however, data on tonnage originated are not available promptly enough to be of much use.

Still another indicator, ton-miles, is more appropriate if the objective is to follow the shifting fortunes of the rail industry. Freight rates are generally graduated by distance so that revenues from operations depend not only on the tonnage of freight originated but also on the average length of haul. (Revenues also depend on the make-up of the tonnage hauled. The rate per ton-mile on coal, for example, is much lower than the rates on live stock, automobiles or precision instruments.) Like tonnage originated, though, ton-miles are available only after the lapse of considerable time following the month to which they apply.

The distance factor is somewhat beside the point, however, if rail freight traffic is watched as a clue to over-all business activity. When a car has been loaded or a volume of tonnage originated, goods have emerged from some stage of extraction or processing. How far they are then transported, while of vital concern to the carriers, tells little, if anything, of further significance about the volume of production. Tonnage originated, therefore, would be the statistic to use for a business index, if the readings were available promptly. Since they are not, it is the carloadings series that must be relied upon for information on the volume of freight traffic.

Rails steady as rivals gain

A further and widely acknowledged reason for the longer-term downward bias inherent in freight carloadings is that the trucks, pipelines and waterways continue to

win traffic at the rails' expense. Thus, even if carloadings were a suitable index to rail freight traffic, they would have distinct shortcomings as a measure of *total* freight volume.

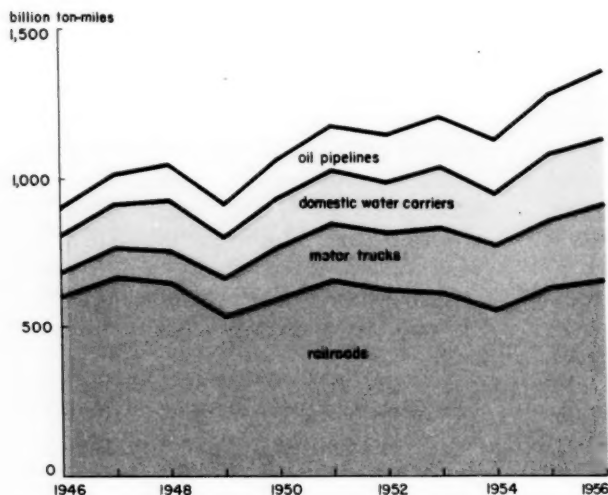
The rail industry's share of intercity common- and private-carrier freight traffic volume has been declining steadily since the war. Currently it amounts to less than half the total—measured in ton-miles, not tons originated—and is a substantially smaller proportion than before the war:

	Per cent
1939	62.4
1943	71.3
1946	66.6
1956	48.2*

* Preliminary

But, growth in the total freight movement by all modes of transport combined has permitted the railroads to maintain a reasonably stable *absolute* volume. Ton-miles by rail in

Postwar growth in intercity freight traffic has gone to the rails' competitors



Note: Airline ton-mileage less than one-tenth of 1 per cent of the total in all years.

1956 are estimated at 656 billion, 9 per cent more than in 1946 and higher by a slender margin than in any other postwar year except 1947. Volume accounted for by the other carriers as a group, however, has more than doubled since the war.

While rail *ton-miles* in 1956 were nearly twice as great as in prewar 1939, *carloadings* were only 10 per cent greater. A continuing decline in carloadings thus has been consistent with reasonable stability in the amount of rail freight service performed.

Ton-miles accounted for by competitors of the railroads, of course, have been growing fast. Since 1946, barge-line volume on the nation's rivers and canals has scored almost a fourfold gain. Truck traffic is up three times, and the oil pipelines today are doing twice the business they did ten years ago. In 1946, the rail carriers generated two ton-miles of freight business for every one ton-mile accounted for by all their

rivals combined. Today, they fall somewhat short of matching their competition, ton-mile for ton-mile. The stability of the rails' yearly ton-miles coupled with the persistent slide in their percentage share of the whole market means, in effect, that the nonrail carriers have fallen heir to most of the postwar growth in the country's total volume of freight traffic.

Hauls lengthening, also

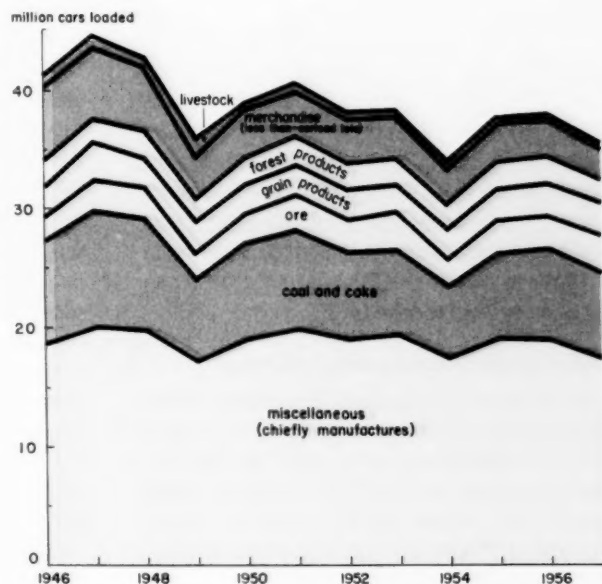
The number of tons carried is one ingredient of ton-miles, the measure of freight traffic volume; length of haul is the other. In good part, because of the diversion of short-haul traffic from rail to highway, the average length of

haul by railroad is on the upgrade and has been ever since the mid-Twenties, at least. The huge expansion in the volume of the transcontinental freight movement during the war pushed the average to an all-time high, 473 miles in 1944. This compared with 318 miles in 1928-29 and 351 miles on the eve of the war in 1940. Currently the average is down from the peak, but at 430 miles or so it still is far above levels known in prior peacetime years.

So far has the average haul lengthened since the Twenties that today's considerably smaller numbers of weekly carloadings actually generate a considerably larger total ton-mileage. This result is due in part, also, to the heavier average loading per car, as tonnage originated by the railroads has scored a modest gain in the postwar period.

One of every five or six carloadings and something over half of all rail freight tonnage originated is accounted for by products of mines, mainly bituminous coal. Minerals production, however, comprises a considerably smaller fraction, only about 10 per cent, of aggregate industrial production activity. Changes in coal production, therefore, have an impact on carloadings out of all proportion to their over-all economic significance. Historically, the production of coal has moved up and down rather erratically, mirroring such factors as transitory interruptions due to labor difficulties in the industry, the longer-term influence of technological changes, which have precipitated shifts in the relative importance of the leading house-

Livestock and small-lot rail shipments hit by truck competition, coal loadings by ascendancy of rival fuels



hold and industrial fuels, and the upsurge of foreign demand for domestic coal that followed in the wake of Suez. Because of these considerations, in particular, it is desirable for most purposes to look behind the carloadings totals, concentrating attention on the "miscellaneous" category.

Roughly half of all carloadings are classed as miscellaneous. Included is the great bulk of all manufactured goods: chemicals, rubber products, machinery, foodstuffs, building materials, steel and nonferrous shapes and products, furniture, automobiles, home appliances, aircraft, scrap, alcoholic liquors and scores of other items. In a general sense, miscellaneous carloadings largely overlap the domain of the manufactures component—90 per cent of the total—of the Federal Re-

serve index of industrial production. For this reason, movements in miscellaneous loadings might be expected, on the face of it, to reflect with some precision, and with a minimal time lag, the ups and downs in manufacturing activity that occur in the short run. Like total carloadings, miscellaneous loadings follow a long-term trend which is biased downward, but this does not necessarily mean that it gives misleading indications on a quarter-to-quarter or even year-to-year basis. How good an indicator is the miscellaneous carloadings series? How well have its movements called the turn on overall business developments?

Carloadings and manufacturing

Manufacturing production reached a crest in December 1956, at a level 49 per cent above its 1947-49 average rate. During the first nine months of 1957 it held to a virtual plateau, one to four points under the peak. Not until October did the manufacturing index begin to show obvious weakness. Mis-

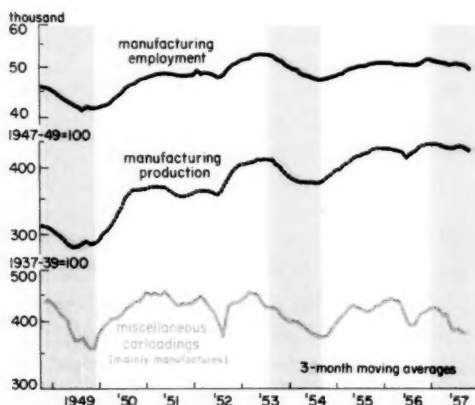
cellaneous carloadings also had topped out in December 1956, but weakness was apparent all through 1957 (although interruptions to the downward course were registered twice, in March and August). From January through September, the sag amounted to about 12 per cent. Manufacturing production meantime was steady. Could the long-term downtrend in carloadings have accounted for the 12 per cent fall? It seems quite unlikely. A drop no more than half as great as this would have been consistent with a stable volume of manufacturing production, to judge from the whole postwar performance of the two series. The week-to-week behavior of miscellaneous carloadings during 1957, therefore, was such as to suggest that a progressive weakening of manufacturing activity was under way. The behavior of the manufacturing production index, on the other hand, shows that this was not in fact the case.

Miscellaneous carloadings have followed a gently declining course since the war. Manufacturing production, on the other hand, has risen substantially in the same period. When comparing the two, these trend differences must be taken into account.

In the period since the low point of the 1953-54 recession through last September, the miscellaneous loadings index moved in relation to its trend line consistently with the behavior of the manufacturing production index on 23 out of 38 possible occasions. Positive deviations of the carloadings index accompanied positive deviations of the manufacturing index and vice versa. In 15 instances the carloadings index behaved differently from the manufacturing index.

On the strength of this performance, therefore, chances are something better than even that a given movement in miscellaneous carloadings points to a valid inference concern-

Carloadings exaggerate decline in three postwar setbacks, fail to show over-all growth trend



ing the direction of manufacturing production activity. These are long odds, however, and not exactly appealing to the analyst concerned to know with some assurance just what is the current direction of business in general. Moreover, the comparison relates to the behavior of a carefully adjusted monthly carloadings index, available only after some delay, and not to the raw weekly data first made ready.

Reading significant conclusions from the weekly figures, as they are released, is a risky business at best. Allowances must be made for transient interruptions of production due to holidays and labor disputes, differences in the starting and ending dates for navigation on the Great Lakes, year-to-year shifts in the timing of the annual grain and livestock movements and a variety of additional influences.

Money by the day

Anyone who stops to think about it will realize that there is more than one kind of money. Individuals and businesses use two kinds—currency (bills and coin) and checking deposits. Money is, of course, the stock in trade of banks. They have a supply of coins and paper money to meet our day-to-day needs. They keep our deposits, and when we write checks they pay out or transfer funds in accordance with our orders.

But while banks deal in the money we use, they (speaking now of Federal Reserve members) have a very special kind of money which is of paramount interest to them—their deposit accounts with their Federal Reserve Banks. These balances constitute the legal reserves of member banks. They can be increased by deposit, with the Reserve Bank, of checks on other banks just as individuals deposit checks in a commercial bank. Likewise, currency returned from circulation can be sent to the Fed to obtain reserve deposit credit. Conversely, these accounts are subject to drains, principally as a result of checks presented by other banks as claims

against the reserve account. Thus, the tide of payments from bank to bank follows an endlessly varying pattern and makes reserve account management one of the most highly technical of modern banking skills.

Although the law requires only that a bank's reserves *average* a specified percentage of deposit liabilities over its reserve period (one week for large banks), most banks try to stay in fairly close balance day by day. Some days a bank may have more of this "reserve money" than it needs. Other days it may be deficient. One way of keeping just the right amount is by "selling (or buying) Federal funds," which is really a loan of reserves by one bank to another for a day at a time at a specified rate of interest. Let's see how this device works.

10:45 a.m.—at the money desk

It is a Monday morning in December 1957. The scene is the second floor offices of the Fifth National Bank of Central City. The officer who manages the bank's money position has just received the results of the

morning's clearings—the last item needed for his estimate of today's reserve position. This calculation is made every morning the bank is open for business. It involves a projection of all the major sources and uses of reserve funds through the end of the day, including any changes in reserve needs. The main job of the money desk is to achieve a fully invested asset position without incurring reserve deficits, and the position estimate is a guide to portfolio management.

If reserve money promises to exceed requirements, some additional investment is in order. If it is too small, either assets must be sold or reserve funds must be borrowed. The type of action indicated will depend largely on the expected duration of the surplus or deficit. Funds provided from a deposit inflow that is expected to last over a period of time will be invested in securities, and the more permanent the inflow, the longer the desired maturity of the investment. Likewise, a persistent deposit drain is usually met by selling securities. On the other hand, because of the costs and market risks involved, few banks buy and sell securities for temporary reserve adjustment purposes. This function is more appropriately performed by transactions in Federal funds.

How then does the "money position man" determine whether to seek or offer Federal funds today? Some of the figures he uses in arriving at his money position estimate are established facts, while others involve educated guesses, largely based on past experience. He knows, for example, the exact amount of reserves needed to meet requirements at today's close because these are based on yesterday's deposits. He also knows what adjustments, if any, need to be made in his balances with correspondents; whether this morning's clearings have increased or decreased his balance; and whether his bank

will receive credit for currency shipments to the Reserve Bank today. Of greatest uncertainty are today's deposit movements involving direct transfers of funds to or from other banks. But even here it is possible to arrive at some estimate of what to expect. Past records show the usual seasonal pattern and, in addition, advance notice of large deposits or withdrawals is often given by customers.

Having made allowance for all known and expected inflows and outflows, the position officer estimates today's surplus at 7 million dollars, all of which he decides to put to work on an overnight basis in the Fed funds market. If this had been Wednesday, the last day of his reserve period, he would have been reluctant to run his position so closely.

Where does the money go?

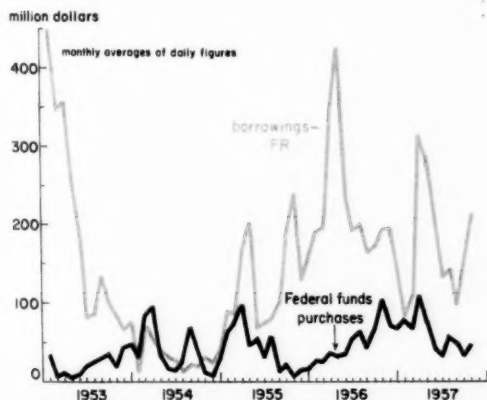
By the time the decision is made to sell funds it is 11:00 a.m. Speed is essential to the successful placement of these funds—especially in later time zone areas. The mechanics of the market are fairly simple. Although there are minor variations in the practices of banks in different areas, a couple of phone calls and a confirming letter are in most cases sufficient to accomplish the sale. Nevertheless, part of the smoothness with which the funds market works is traceable to the predetermined and fairly rigid framework within which each bank operates. The limitations are in part of legal origin and in part a matter of individual bank policy. National banks are prohibited by law from lending more than 10 per cent of capital and surplus to any one customer and cannot borrow more than the amount of their capital stock. In addition, most banks which are active in this market work from an approved list of borrowers and with specified maximum amounts authorized for each. Transactions often depend on established contacts

between particular banks, especially among correspondents.

The Fifth National Bank, with a capital and surplus of 40 million dollars, can lend a maximum of 4 million to an individual borrower. So at least two deals will be required to employ the 7 million surplus. As a first step, a phone call is made to a neighboring bank which frequently buys funds. Yes, they can use 4 million at 3 per cent. A second call to the Fed with instructions to transfer the funds from the reserve account of the Fifth National to that of the buying bank completes the deal.

Meanwhile, a telegram arrives with a request for funds from a smaller correspondent located in a southwestern city—amount wanted: 1.2 million, its borrowing limit. The position manager hesitates. He could more conveniently send the remaining 3 million to his New York correspondent or, if the latter is not buying funds today, he could contact a brokerage house in New York which acts as a clearing house for funds. This firm will

Borrowings from the Federal Reserve
top Federal funds bought by Midwest
banks except when money is easy



arrange a deal with a bank wanting to buy funds. However, mindful of his own correspondent relations, he sells the 1.2 million and turns to the New York market to place the remaining 1.8 million. Since the demand for funds is fairly strong, these funds too are sold at 3 per cent. The money going out of the District is moved through the Federal Reserve wire transfer facilities and credited immediately to the reserve accounts of the borrowing banks at their respective Reserve Banks. Tomorrow, all the transfers will be reversed and the 7 million will come back to Fifth National, together with \$583.31 in interest.

Here today—gone tomorrow

Because excess reserves cannot be carried over to satisfy requirements in a subsequent period, the earnings potential of excess reserves not disposed of by the close of a reserve week is lost forever. The higher the rate of interest, the more "costly" surplus reserves become in terms of foregone earnings.

The Federal funds market flourishes because of the efforts of numerous reserve managers to employ even the most transitory surpluses, while guarding against incurring losses on their investment accounts. Because of their flexibility and freedom from market risk, Federal funds deals constitute an adjustment mechanism which many banks feel is ideally suited to day-to-day reserve adjustment needs.

The rising rates and restricted supply of funds in recent years have naturally enhanced the attractiveness of the Federal funds market as an outlet for surplus reserve funds. Trading in Fed funds actually had its beginnings in the Twenties, but was dormant during the reserve-abundant Thirties and the war years. During World War II, when the

Federal Reserve System was committed to purchase Treasury bills from member banks at a $\frac{3}{8}$ per cent discount, and during the postwar support period, there was no demand for Federal funds. In periods when reserves are plentiful, funds have sold as low as $\frac{1}{8}$ of 1 per cent but the volume of trading at such times is usually very small. When money is scarce, on the other hand, the rate tends to be maintained equal to the Federal Reserve discount rate, and during the past year there have been relatively few days when it has fallen under 3 per cent. At this rate, 10 million dollars of funds sold overnight provides gross earnings of \$833.33. If the sale is made on Friday this income is tripled. Yet without the funds market, a considerable volume of short-term funds would not be fully utilized.

A two-way street

It is obvious, of course, that some banks can sell Federal funds only because other banks want to buy them. But buyers usually are available, particularly when money is tight. In fact, tomorrow we may find Fifth National's position man looking for funds instead of offering them. He could, of course, borrow from his Reserve bank, and if he is unable to locate sufficient funds he may turn to the discount window of his Federal Reserve Bank to cover his residual needs. Some banks always use this method of obtaining funds although they employ the Federal funds market to absorb their surpluses. But others try the Federal funds market first for several reasons: (1) funds are sometimes cheaper, (2) the deal may be mechanically easier, (3) they dislike using discount window privileges except for emergencies and (4) negotiations in Federal funds contribute to better contacts and correspondent relationships.

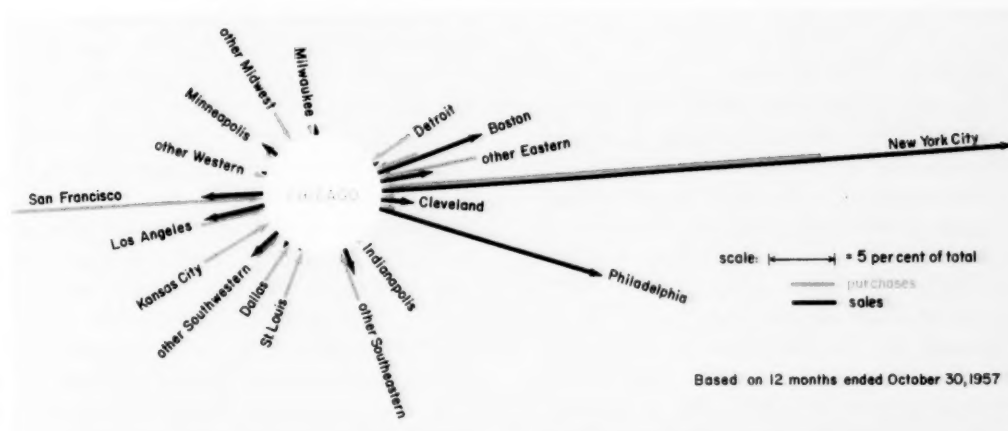
Although many banks switch from one side of the market to the other as their reserve positions shift, most banks are predominately either buyers or sellers, at least for several months at a time. Which they are reflects basic differences in investment policy. Those which chiefly sell funds tend to maintain a surplus position over time, while those which are persistently buyers appear to regulate investment volume to correspond roughly with peak deposit levels. Banks which are chiefly sellers are the more numerous of the two groups.

The participants

Probably less than 200 banks participate in this market, and not even half of these with any sort of regularity. All of these institutions are large for the simple reason that transactions are typically in blocks of a million dollars or more. In order for a national bank to be able to negotiate a 1 million dollar Fed funds sale it must have a combined capital and surplus of 10 million. This would exclude most banks with deposits of less than 100 million dollars.

Furthermore, the majority of small banks do not find it advantageous to manage their money positions closely. For them, daily investment of marginal funds costs more than it is worth. There are, of course, some medium-sized banks which do desire to operate in Federal funds. For them, another avenue to this market is open through repurchase agreements, or similar arrangements involving Government securities. Purchases of bills, with agreement to resell the following day (or with simultaneous sale for payment tomorrow) are considered loans secured by Governments and are legally permissible up to 100 per cent of capital and surplus. This method is sometimes also used by larger banks in preference to "straight" funds sales,

Chicago banks buy and sell Federal funds all over the nation but the greatest proportion of transactions is with New York



especially when surpluses are large enough to require several separate transactions under the 10 per cent rule. Large borrowing banks are often willing to negotiate repurchase contracts to tap the funds of smaller banks. Transactions with Government security dealers are frequently of this type.

Perhaps the greatest limitation on activity of both the individual bank and the total volume of trading in Federal funds is the amount and distribution of excess reserves. A large volume, however, does not always give rise to heavy trading. Concentration of excess reserves in banks which do not participate in the market often results in a short supply, while fairly equal distribution of surpluses among large banks normally gives rise to a small demand for funds. Moreover, a supply-demand situation which results in a very low rate of interest discourages trading.

The economic significance

Purchases of Federal funds by the 150 banks which participated in a month-long

survey by the Federal Reserve System about a year ago averaged 760 million dollars per day. This exceeded both the 740 million average daily borrowing from the Federal Reserve Banks by all member banks in the same month and the 590 million average "unused" excess reserves of member banks.

The purchase of Federal funds accomplishes the same purpose for an individual bank as borrowing from the Federal Reserve, but, unlike the latter, it does not increase the total volume of reserves in the banking system. Rather, it permits more intensive use of existing reserves. It should not be concluded, therefore, that Federal funds provide a complete substitute for borrowing from the Federal Reserve. Both the limited availability of funds and the imperfect nature of the market render transactions in Federal funds inadequate as a dependable source of ultimate liquidity for the commercial banking system. Both buyers and sellers of funds would be less willing to seek continuous full investment of their funds without the assurance

of an always available "last-resort" source of reserves to meet emergencies, namely, the discount window of the Federal Reserve Banks.

District dimensions

In the twelve-month period ending with October 1957, sales of Federal funds by Seventh District banks averaged about 30 million dollars per day, while purchases were roughly double that amount. There is, of course, a great deal of day-to-day variation in volume. The survey of November 1956 indicated that these banks' transactions were exceeded only in the New York and San Francisco Districts, where a considerable portion of gross activity is due to the fact that some banks in these areas operate on both sides of the market at once—buying and selling their correspondents' funds in addition to servicing their own reserve needs.

The large Midwestern banks, on the other hand, use Federal funds mainly as an adjustment mechanism. Purchases by these banks have exceeded sales on balance over the past five years, with peaks corresponding to periods when particular circumstances, such as the Cook County tax date, exerted unusual pressure on this area. Moreover, in the short run, when purchases are high sales tend to be down, reflecting the fact that reserve pressures often hit banks in the same area simultaneously. The dollar totals, of course, are dominated by the activities of the large banks which tend to be the heaviest buyers of funds. Because their needs are large, while sellers' lending limits are relatively small, the large banks sometimes purchase funds from as many as 15 or 20 banks in a single day. As is indicated in the chart, only in periods of fairly "easy" money have Midwest banks been able to supply their major borrowing needs in the funds market.

Analysis of purchases and sales by geographic areas reveals that District banks dealt with other banks in almost every large city in the nation at some time or other during this twelve-month period. Chicago banks account for a large proportion of total District purchases and a smaller, but still substantial, share of sales. Most of the funds flowing into Chicago came from New York and San Francisco. These two areas alone supply over half of the gross inflow of Federal funds to Chicago banks. Kansas City and Los Angeles were also frequent sources. The bulk of funds sold by Chicago banks went to eastern cities — principally New York, Philadelphia and Boston. Philadelphia is the only area where Chicago banks consistently sell more funds than they buy.

There is, of course, some local trading of funds, but this is limited by (1) discrepancies between amounts needed and amounts available, and (2) differences in the timing of reserve position computations. Time pressures make the Fed funds market a "first come-first served" operation. Nevertheless, there seems to be a tendency recently for a larger amount of trading to develop between banks within the District. This is probably an outgrowth of two factors: the over-all scarcity of funds and the banks' growing awareness of the convenience of Federal funds as a reserve adjustment device.

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